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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,813	02/01/2000	Gregory Allen North	2836-P100US	5319

7590 02/25/2004

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EXAMINER

FERRIS III, FRED O

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/495,813

Applicant(s)

NORTH ET AL.

Examiner

Fred Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-56 and 66-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-56 and 66-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. *This Office Action is in response to applicants preliminary amendment filed 30 June 2000. Applicants have cancelled claims 1-50 and 57-65. Claims 51-56 and 66-73 are currently pending in this application. Claims 51-56 and 66-73 have been rejected.*

Drawings

2. *This application has been filed with informal drawings that are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.*

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. ***Claims 66-73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.***

Specifically, the specification and figures 1-2 depict a multi-chip design based on the ARM720T and do not disclose a mixed-signal system-on-chip (SOC) design in

accordance with the claimed limitations of independent claim 66. Dependent claims inherit this defect.

4. Claim 56 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Matter critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Specifically, the limitation of claim 56 relating to the unit being "capable of operating correctly from one AA battery for a period of at least one hour" is not enabling because specification provides no information (matter) on the claimed audio decoder circuits load or current draw. Accordingly, a skilled artisan would not be able to determine how long the unit could actually operate correctly from a single AA battery.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 51-56 and 66-73 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent 5,914,941 issued to Janky.

Per independent claims 51 and 66: *Janky discloses a personal (hand-held) audio decoder device containing a CPU capable of decoding a stream of digital audio data to*

generate analog audio. The unit disclosed by Janky also includes memory for instructions, a DAC for generating audio, a security (encryption) circuit, programmable elements (ROM/FLASH), security procedure in memory, and secure modes. (Abstract, Summary of Invention, CL7-L18-52, CL8-L34-65, CL9-L25-55, CL11-L30, 46, Figs. 2-5)

Per dependent claims 52-56 and 67-73: *As cited above, Janky includes programmable elements (fuses), ROM memory, a microprocessor, security circuit, and encrypted (locked) entries. Further, compatibility with standard digital audio data formats such as MS audio, ACC, and MPEGx, layer 3 encoded data, and would be inherent in Janky or nearly any portable audio decoder.*

6. *Independent claim 51 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent 6,421,305 issued to Gioscia et al.*

Per claim 51: *Gioscia discloses personal (hand-held) audio decoder device containing a CPU capable of decoding a stream of digital audio data to generate analog audio and includes memory for instructions and a DAC for generating audio. (Abstract, Summary of Invention, CL4-L35-CL5-L45, Figs 1-3)*

7. *Claims 51-56 are further rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent 6,629,000 issued to Moon et al.*

Per claims 51-56: *Moon discloses portable personal audio decoder device containing a CPU capable of decoding a stream of digital audio data to generate analog audio and includes memory for instructions and a DAC for generating audio from*

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various digital formats including MPEG. (Abstract, Summary of Invention, CL3-L35-65, CL4-L19-65, CL5-L19-CL6-L35, Figs 1-3f)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. *Claims 51-56 and 66-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,629,000 issued to Moon et al in view of U.S. Patent 5,867,579 issued to Saito.*

Independent claim 51 is drawn to:

Audio decoder comprising:

CPU decoding stream of digital audio data

Memory for instructions

DAC for generating audio

Independent claim 66 further includes limitations drawn to:

Security circuit for secure mode of operation

Security circuit accessible programmable elements for enabling security circuit

Memory for storing executable security procedure to initiate secure mode

Per independent claims 51 and 66: Moon discloses a portable personal audio decoder device containing a CPU capable of decoding a stream of digital audio data to generate analog audio and further includes memory for instructions, a DAC for generating audio from various digital formats (including MPEG), and programmable (ROM/FLASH) elements. (Abstract, Summary of Invention, CL3-L35-65, CL4-L19-65, CL5-L19-CL6-L35, Figs 1-3f)

Moon does not explicitly disclose a security (encryption) circuit for secure operation.

Saito teaches the use of a memory based encryption (security) circuit incorporating restricted access programmable elements (ROM/EEPROM) and a memory for storing executable encryption (security) procedure. (Abstract, Summary of Invention, CL11-L21-CL12-L45, CL13-L45-CL14-L50, CL16-L15-61, CL19-L61-CL20-L25, Figs. 4, 5, 9-12)

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of Moon relating to a portable personal audio decoder containing a CPU capable of decoding a stream of digital audio data to generate analog audio, with the teachings of Saito relating to the use of a memory based encryption (security) circuit incorporating restricted access programmable elements, to realize the claimed invention. It would further have been obvious to only allow the security circuit access to programmable elements for initiating a secure mode in order to keep the security circuit from being defeated. An obvious

motivation exists since this area of technology is highly competitive with many portable digital audio devices available in the market place, and large amounts of money being spent in product development and improvement. (See Saito Abstract, for example) Accordingly, a skilled artisan would have made an effort to become aware of what capabilities had already been developed in the market place and, hence, would have been motivated to modify the teachings of Moon with the teachings of either Saito in order to reduce development time and cost.

Conclusion

9. *The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.*

U.S. Patent 6,385,596 issued to Wiser teaches secure music distribution.

U.S. Patent Publication 2002/0094084 A1 teaches conditional access.

U.S. Patent 5,978,689 teaches personal audio system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 703-305-9670 and whose normal working hours are 8:30am to 5:00pm Monday to Friday.

Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 703-305-3900.

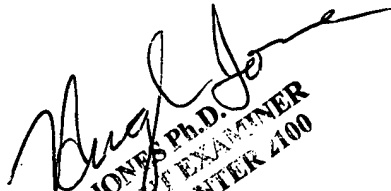
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